Logistics Modernization: The Answer to Attrition Logistics

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Logistics Modernization: The Answer to Attrition Logistics

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Advancements in tactics, equipment, and technology
have been utilized extensively within the aviation combat
element (ACE) and ground combat element (GCE) over the last
two decades to dramatically increase their range and
lethality on the battlefield. However, commensurate
improvements have not occurred within the Marine air ground
task force's (MAGTF) combat service support element (CSSE),
which has resulted in a capabilities gap between the fast
moving, highly efficient "teeth" of the MAGTF, and its
antiquated and unresponsive "tail." The inability of the
CSSE, with its capabilities rooted in the tactics and
technology inherited from its "attrition warfare" oriented
predecessors, to support the highly mobile and maneuver-
centric warfighters of the ACE and GCE was clearly
demonstrated in Operation Iraqi Freedom I (OIF I). Lack of
a well defined command and control (C2) architecture,
reliance on antiquated and non-interoperable supply and
maintenance systems, lack of total asset visibility (TAV)
and in-transit visibility (ITV) within the MAGTF, and the
radically different task organization adopted by the CSSE
in theater, all contributed to its inability to provide
responsive combat service support (CSS) to the MAGTF's
maneuver forces. To solve this problem, the Marine Corps
has embarked upon the largest and most comprehensive

logistics transformation project ever attempted. By coupling the lessons learned from OIF I with the logistics modernizing initiatives first outlined in the integrated logistics concept (ILC) of the late 90s, the Marine Corp's Logistics Modernization Task Force is currently supervising the long overdue transformation of its CSS community's people, processes, and technology. The logistics modernization (Log Mod) effort will achieve its mission of providing a CSSE capable of supporting the maneuver forces of the 2015 MAGTF by focusing on the transformation of the following logistics areas: the logistics operational architecture (Log OA), logistics C2, the realignment of supply and maintenance functions, MAGTF distribution, and finally, the renaming and reorganization of the force service support groups.

The Logistics Operational Architecture

Currently, the CSS community lacks a real-time, shared data information environment, because it utilizes over two-hundred information technology (IT) systems that were acquired in response to a specific need instead of anticipating a general requirement.[1] Therefore, diverse technologies and IT solutions were acquired by CSSEs without a clear understanding of how they were expected to interact between one another. Thus, when the Marine

Logistics Command (II MEF) and 1st FSSG (I MEF) deployed to OIF I, they quickly discovered that the requisitioning process did not function due to the non-interoperability of their respective requisitioning systems. Furthermore, a detailed understanding of exactly what comprises the "logistics chain," along with a common idea of what tasks must be performed to move material from the source of supply to the warfighter (to include all associated supply, maintenance, and distribution requirements) does not currently exist. Consequently, no shared vision exists amongst the CSS community on exactly what needs to be done, who should do it, and what IT requirements will enable those activities throughout the logistics chain.

The Log Mod initiative addresses these shortfalls by defining the Log OA, which in turn provides a description of the tasks, activities, and information exchange requirements that exist throughout the logistics chain.[2] By providing this "blueprint," the Log OA has enabled the entire CSS community to understand its requirements and has thereby enabled analysts to devise the IT solutions and process reforms necessary to conduct successful log chain management. Primary amongst the IT solutions is the development and fielding of the Global Combat Support System- Marine Corps (GCSS-MC), which, when fully

operational, will drastically reduce the number of IT

systems required within the CSS community, through its

ability to provide a real-time shared data environment.[3]

Additionally, by identifying the essential tasks to be

accomplished throughout the log chain, the Log OA has

identified the need for several other process improvements,

which form the core of the remaining Log Mod initiatives.

Logistics Command and Control

Logistics C2 requirements within the MAGTF are defined by

a need to provide the CSSE commander and staff with the

information to plan for and execute their missions

properly. This not only necessitates that a clearly

defined architecture is understood (who needs to

communicate with whom throughout the logistics chain), but

also that the CSSEs are equipped with the IT systems that

meet their global communications requirements (specifically

with vendors and distribution agencies linking the

logistics chain from wholesale sources of supply to the

warfighter). OIF I clearly revealed that the CSSE was

lacking in both areas. The lack of an architecture and

equipment to enable an accurate and real time common

tactical picture (from a logistics perspective), greatly

hindered the MAGTF commander's ability to influence the

battlefield.

To address these issues, the Log Mod effort has focused on conducting a nodal analysis of the logistics chain throughout the strategic, operational, and tactical spectrum.[4] By understanding the information and agencies that need to be addressed as supplies and services are performed along these nodes from "factory to foxhole," the Log Mod effort has enabled the CSSE to understand the C2 requirement throughout the logistics chain. Furthermore, intensive IT solutions centered on addressing the CSSE's communications equipment shortfalls, and fielding of the GCSS-MC will ensure that the CSSE of the future can command and control the logistics effort required to support the maneuver capabilities of the 2015 MAGTF.

CSSE Reorganization/Realignment

OIF I demonstrated that two major organizational practices inherited from the CSSE's attrition warfare oriented predecessors will not be effective in supporting the future MAGTF. First, the active duty FSSGs are currently established with functionally aligned units designed to operate cost efficiently in garrison instead of mission effectively while deployed. Consequently, when the FSSG deploys in its entirety, as was the case for OIF I, it must undergo a cumbersome task organization process to create the multifunctional requirements based units that

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are required in deployed environments. This wastes

valuable time that should be spent on externally focused

activities (i.e., how to better support the warfighter),

and creates units that have no habitual relationship

internally or with the units they will support in combat.

Second, the naming convention currently utilized

within the FSSGs (CSS detachments and groups) does not

adequately convey the size or command structure inherent to

that unit and is, therefore, inconsistent with Marine Corps

and joint doctrine.[5]   For example, the term combat service

support detachment is currently applied to units ranging in

size from a few dozen Marines and commanded by a

lieutenant, to several hundred Marines commanded by a

lieutenant colonel. This creates confusion amongst

supported commanders who, when informed of the name of the

unit supporting them, consistently ask, "How big is it, and

what can they do?"

In order to negate the need for the resource consuming

task organization process that the FSSG requires prior to

deploying, the Log Mod initiative has directed that the

FSSGs operate in garrison the way they will in combat.

This fundamental change in outlook requires the FSSG to

change from its functionally aligned format to a

capabilities-based organization with established direct and

general support missions that will remain intact regardless

of whether in garrison or deployed. This will greatly

enhance the support provided to the MAGTF because it will

enable the formation of habitual relationships within the

CSS units and with their supported units. Furthermore, by

negating the need to alter its organization drastically to

meet deployment needs, the more efficient task organization

process will enable the CSSE to focus more of their efforts

on the supported unit prior to deployment.

The Log Mod solution to correct the confusion

accompanying current naming conventions is simple: change

them. Thus, Log Mod has mandated that the MAGTF's CSSEs be

named in the following manner: combat logistics groups

will be MEF level assets commanded by general officers

(today's FSSGs). Beneath them will fall combat logistics

regiments (commanded by colonels), then combat logistics

battalions (commanded by lieutenant colonels), and finally

combat logistics companies (commanded by captains).

Additionally, these units will be assigned specific direct

or general support roles in order to allow the

establishment of habitual relationships that are vital to

success on the battlefield.[6] By implementing these naming

changes, the Log Mod initiative will enable planners from

all services to gain a quick and accurate understanding of the size and command structure of a MAGTF's CSS units.

Realignment of Supply

Nowhere is the FSSG's "attrition logistics" mindset more apparent than in the supply field. Decades of reactive stock management, disjointed and stove-piped supply chains, antiquated IT systems (many designed in the 70s), and the lack of single process ownership for the supply chain, have led to the accumulation of an "iron mountain" of supplies that wastes resources and hampers responsive supply support.[7] The enormous stockpiles of supplies located in rear areas and the relative lack of critical supplies (particularly in repair parts) located with maneuver units in OIF I clearly demonstrated the shortcomings of this system.

The Log Mod effort to transform the supply function into a viable maneuver partner in the MAGTF involves the complete transformation of the function. First, a single process owner for the supply chain (from source to customer) will be established, ensuring unity of command. Second, inventory practices will be updated to better leverage distribution capacity, thereby, enabling a reduction of stocks. In this model, only mission critical or difficult to attain items are stocked, and the remainder

are requisitioned and delivered (utilizing an enhanced

distribution system and better defined service agreements

with sources of supply) to the customer on an "as required

basis."[8] Finally, the GCSS-MC module will enable the first

ever shared data environment within the supply chain, and

will thereby provide requesting units as well as supporting

units total visibility of the status of their requisitions.

This transition to automated solutions capable of reducing

the involvement of supported units is a critical first step

in enabling a transfer of many logistics responsibilities

from supported units to their supporting units.

Realignment of Maintenance

Maintenance activities within the CSSE are closely

aligned with the supply architecture and practices required

to support them. Therefore, it is not surprising that the

maintenance community suffers from the same lack of updated

processes and equipment as their supply brethren. Not only

are their systems outdated and incapable of providing real-

time shared information, but also the five echelons of

maintenance (EOM) construct has outgrown its relevance.

Under this fragmented structure, maintenance efforts are

redundant (and, therefore, duplicated) at varying EOMs and

are inefficient due to the lack of a single process owner

throughout the maintenance chain.

Under the Log Mod initiative, the future of the
maintenance function is radically different from today's
slow and inefficient system, and involves similar
transformations in processes and technology. Primary
amongst these is the reduction of the five EOM system into
a three level of maintenance (LOM) construct.[9] More
maintenance capability will be pushed to using units under
this system, without overburdening them, because of the
increased efficiencies created by the fielding of GCSS-MC.
Furthermore, a single process owner for the entire
maintenance chain will be created, thereby ensuring unity
of command throughout the chain. Thus, with a more robust
maintenance capability resident at the using unit level,
the CSSE's maintenance community will be better equipped to
meet the intense maintenance demands of the highly mobile
2015 MAGTF.

MAGTF Distribution

The CSSE's inability to provide in-transit visibility
(ITV) of supplies in the distribution pipeline, along with
the MAGTF's inability to capture total asset visibility
(TAV) of its limited lift assets, greatly limited the
operational reach of the MAGTF during OIF I. While the
lack of adequate IT capabilities contributed to this
unacceptable situation, the reliance on a distribution

pipeline that was segmented at numerous points between its commercial sector roots in the United States and its MAGTF terminus in Iraq formed the crux of the problem.

The Log Mod initiative has addressed these shortfalls by streamlining the distribution chain and providing for single process ownership of the entire chain to ensure unity of command.[10] Furthermore, the implementation of GCSS-MC (along with other IT enablers) will enable ITV and TAV, which will greatly increase the MAGTF's ability to track its supplies as they come into theater. These systems will also enable more efficient use of limited lift assets to ensure the efficient distribution of those supplies over the last tactical mile. These changes will ensure that the future MAGTF will have a distribution architecture that can support the exhaustive materiel requirements involved in conducting maneuver warfare.

Conclusion

Recent experiences in OIF I have shown that the MAGTF's attrition warfare-based CSSE is currently incapable of supporting the fast moving maneuver forces of the 2015 MAGTF. The logistics modernization initiative is the Marine Corps' method of correcting these deficiencies to ensure that operational pauses due to logistics are not a reality on future battlefields. This expansive effort will

require a considerable amount of time and effort to

achieve; however it is imperative given the unacceptable

nature of the consequences should the CSSE fail to keep up

with the requirements of their supported units on future

battlefields.

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[1] Rineaman, Keith, and Ruark, Robert (Col USMC). "The Logistics Architecture: Our Sandtable for Logistics Modernization." <u>Marine Corps Gazette</u> Aug. 2005: 27.

[2] Ibid: 28.

[3] Delarm, Randy F., and Eckert, Ronald (LtCol USMC (Ret.)). "GCSS-MC." <u>Marine Corps Gazette</u> Aug. 2005: 21.

[4] Headquarters Marine Corps. "Logistics Modernization Operations Plan (Solution Initiating Directive." Jun. 2005: 45.

[5] Ibid: 55.

[6] Ibid: 38.

[7] Ibid: 70.

[8] Barnes, D.G. (LtCol USMC). "Realignment of Supply Functions Brief." <u>USMC.mil</u>. 15 Apr. 2004 <https://logmod.hqmc.usmc.mil/library_briefs.htm>.

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[10] Headquarters Marine Corps. "Logistics Modernization Operations Plan (Solution Initiating Directive." Jun. 2005: 101.